

CLAIMS

1. A thermoplastic composite material containing
 - a) at least 15% by weight of an organic fibrous material or of a mixture of two or more organic fibrous materials as component A and
 - b) at least 15% by weight of a thermoplastic binder as component B,
characterized in that the binder contains at least 10% by weight of a polymer selected from the group consisting of polyurethanes, polyesters, polyamides, polyolefins, polyvinyl esters, polyethers, polystyrenes, styrene/olefin copolymers, polyacrylates or ethylene/vinyl acetate copolymers or mixtures or copolymers of two or more of the polymers mentioned and does not consist solely of two different polyacrylates.
2. A composite material as claimed in claim 1, characterized in that it contains 15 to 45% by weight of organic fibrous material as component A.
3. A composite material as claimed in claim 1 or 2, characterized in that it contains at least 40% by weight of thermoplastic binder as component B.
4. A composite material as claimed in any of the preceding claims, characterized in that the thermoplastic binder contains at least 30% by weight of polyvinyl acetate.
5. A composite material as claimed in any of the preceding claims, characterized in that the thermoplastic binder contains at least 10% by weight of a copolymer of butadiene and styrene.

BEST AVAILABLE COPY

- 5 6. A composite material as claimed in any of the preceding claims, characterized in that it optionally contains up to 20% by weight of inorganic salts, cationic polymers, preservatives, dyes, natural and/or synthetic fats, paraffins, natural and/or synthetic oils, silicone oils, ionic and/or nonionic surfactants.
- 10 7. A composite material as claimed in any of the preceding claims, characterized in that it contains synthetic fibers, vegetable fibers or animal fibers as component A.
- 15 8. A composite material as claimed in any of the preceding claims, characterized in that it contains leather fibers as component A.
9. A composite material as claimed in any of the preceding claims, characterized in that the fibers of component A have a stretched length of about 0.1 to about 15 mm.
- 20 10. A process for the production of a thermoplastic composite material containing
- a) at least 15% by weight of an organic fibrous material or of a mixture of two or more organic fibrous materials as component A, and
- b) at least 15% by weight of a thermoplastic binder as component B,
- 25
- 30 in which fibers with a stretched fiber length of 0.1 to 15 mm as component A are mixed simultaneously or successively in any order with a polymer dispersion or a mixture of two or more polymer dispersions each containing at least one polymer selected from the group consisting of polyurethanes, polyesters, polyamides, polyolefins, polyvinyl esters, polyethers, polystyrenes, styrene/olefin copolymers, polyacrylates or ethylene/vinyl acetate copolymers or mixtures or copolymers of two or more of the
- 35 polymers mentioned, the dispersion(s) not consisting solely of two different polyacrylates, to form a mixture so that the polymers present in the dispersion(s) form component B, after which the

mixture is treated with an aqueous solution of an aluminum salt or a copper salt, dewatered and dried.

5 11. The use of the thermoplastic composite material claimed in any of claims 1 to 9 or the thermoplastic composite material produced by the process claimed in claim 10 for the profile sheathing of wall, floor and ceiling panels, for the surface coating of furniture fronts with or without inner radii, for edge banding or for the surface coating of parts in interiors of motor vehicles.

10

12. A thermoplastic composite material as claimed in any of claims 1 to 9 or produced by the process claimed in claim 10, characterized in that it is laminated with a polymer film on at least one surface.

15

13. A process for the surface coating of objects with the thermoplastic composite material claimed in any of claims 1 to 9 or 12 or produced by the process claimed in claim 10, characterized in that the thermoplastic composite material and the surface of the object are bonded by hotmelt adhesive.

BEST AVAILABLE COPY